



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/853,634	05/14/2001	Masaaki Nishino	Q64483	7274

7590 04/09/2003

SUGHRUE, MION, ZINN, MACPEAK & SEAS  
2100 Pennsylvania Avenue, N.W.  
Washington, DC 20037

EXAMINER

AMINI, JAVID A

ART UNIT	PAPER NUMBER
----------	--------------

2672

DATE MAILED: 04/09/2003

3

Please find below and/or attached an Office communication concerning this application or proceeding.

T.

# Office Action Summary

Application No.

09/853,634

Applicant(s)

NISHINO, MASAOKI

Examiner

Javid A Amini

Art Unit

2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☒ Claim(s) 1-6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 May 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 rejected under 35 U.S.C. 103(a) as being unpatentable over Masukane et al.

1. Claim 1.

“An information displaying system, comprising: an A/D converting means for converting analog RGB signals inputted from a first input terminal to first digital RGB signals; a selecting means for selecting either second digital RGB 5 signals inputted from a second input terminal or said first digital RGB signals based on the inputted order, and for outputting third digital RGB signals being selected digital RGB signals; a screen mixing means that makes said third digital RGB signals store in a first memory and also makes digital information data 10 inputted from a third input terminal store in a second memory, and detects sizes of said third digital RGB signals and said digital information data, and calculates designated control information so that said digital information data are displayed at outsides of a displaying region of said third digital RGB signals by mixing said digital information data with said third digital RGB signals, and generates a synchronization signal based on said designated control information, and reads said third digital RGB signals from said first memory and said digital information data from said second memory based on said synchronization signal, and forms displaying data by mixing said

Art Unit: 2672

third digital RGB signals read from said first memory and said digital information data read from said second memory; and a displaying means for displaying said displaying data”, Masukane et al. teaches in (col. 5, lines 5-27) the RGB switch plays the role of a selector circuit for selectively connecting the three inputs to an output thereof one at a time. The output of the RGB switch is connected to the inputs of an analog-to-digital converter (ADC), an NTSC encoder 128, and a Gen-lock circuit. Masukane illustrates in Fig. 2 the board has a signal converting and mixing function, i.e., it is capable of receiving NTSC, RGB and S-type video signals, as well as VGA video signals and outputting them as any one of NTSC, RGB, S-type and VGA video signals as needed. Masukane teaches in (col. 6, lines 22-45) Gen-lock logic block receives video synchronization information derived from the signal output from RGB switch by way of the Gen-lock circuit along line. The video synchronization information could pertain to RGB, NTSC or S-type video depending on the particular signal output from the RGB switch. Masukane teaches in (col. 5, line 65-67) Specifically, with the programmable frame memory it is possible to transform VGA type video signals into NTSC type video signals and vice versa. Masukane teaches in (col. 1, lines 39-43) The personal computer may then fetch the bit-mapped data later as needed and, thereafter, handle the data as a VGA image including displaying the data on VGA monitor. Masukane does not disclose expressly display digital information data at outsides of a displaying region of third digital RGB signals. It would have been obvious at the time the invention was made to one of ordinary skill in the art to display digital information data at outsides (overlay) of a displaying region with respect to the overlay in Masukane since it has been held an image overlay and rescan board capable of receiving image signals of a variety of formats including NTSC image signals representative of a real

Art Unit: 2672

image and VGA image signals representative of a computer generated graphics image. The overlay and rescan board includes a timing gate-array for addressing a frame memory and for sending and receiving data to and from the frame memory.

2. Claim 2.

“An information displaying system in accordance with claim 1, wherein: said designated control information consists of a dot clock frequency, a horizontal synchronizing frequency, a vertical synchronizing frequency, a front porch, a back porch, and a pulse width, in order that said displaying data are displayed on said displaying means”, Masukane illustrates in Fig. 2, item 162 is clock oscillator (clock frequency) and this item satisfies the Markush group (Markush group, recites members as being “selected from the group consisting of A, B and C.” See Ex parte Markush, 1925 C.D. 126 (Comm’r Pat. 1925).

3. Claim 3.

“An information displaying system in accordance with claim 1, wherein: said screen mixing means forms said displaying data so that said digital information data are displayed on at least one or two or more regions of upper, lower, right, and left end parts outside said displaying region of said third digital RGB signals”, Masukane teaches in (col. 16, lines 7-17) the information originally input on line and converted into digital form by the ADC results in a different type of digital representation than the information sent from the computer along line to bus Buffers and through the VGA controller to the VGA RAM. The information sent by the computer uses a look-up table, as discussed fully above, while the information output of ADC instead includes relative weights of the red, green and blue colors in its digital format. That is

why the DAC must be controlled, so that it can know which of the digital-to-analog conversion techniques it is to perform.

4. Claim 4.

“An information displaying system in accordance with claim 1, wherein: said screen mixing means outputs said displaying data by applying scaling to said displaying data so that said displaying data correspond to the resolution of said displaying means”, Masukane teaches in (col. 5, lines 30-33) the ADC has a reference generator, not shown, for setting a full scale range and converts an analog RGB signal appearing on the input into corresponding digital data, the digital data being fed out via an output.

5. Claim 5.

“An information displaying system in accordance with claim 1, wherein: said screen mixing means outputs said displaying data by converting said displaying data to analog RGB signals”, Masukane teaches in (col. 5, lines 30-33) the ADC has a reference generator, not shown, for setting a full scale range and converts an analog RGB signal appearing on the input into corresponding digital data, the digital data being fed out via an output.

6. Claim 6.

“An information displaying system in accordance with claim 1, further comprising: an D/A converting means for converting said displaying data to analog RGB signals”, the step is obvious see Fig. 2 item 191.

***Drawings***

The drawings (figures 1 and 3) are objected to because need to be more descriptive (for example: label, legend or etc.). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claim 2 rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicant does not show how the "dot clock frequency" can be calculated! And also the term "front porch and back porch require more specification and explanation!

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Regarding claim 3, the phrase "or " renders the claim indefinite because the claim includes elements not actually disclosed (those encompassed by "or "), thereby rendering the scope of the claim unascertainable. See MPEP § 2173.05(d).

***Conclusion***

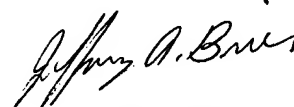
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javid A Amini whose telephone number is 703-605-4248. The examiner can normally be reached on 8-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 703-305-4713. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-8705 for regular communications and 703-746-8705 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

Javid A Amini  
Examiner  
Art Unit 2672

Javid Amini  
April 7, 2003

  
JEFFERY BRIER  
PRIMARY EXAMINER